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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/506,813

01/12/2005

Markus Oles

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26694

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EXAMINER

MATZEK, MATTHEW D

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

09/22/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/506,813	Applicant(s) OLES ET AL.	
	Examiner MATTHEW D. MATZEK	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-32 is/are pending in the application.
- 4a) Of the above claim(s) 6-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,5 and 24-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/21/2008 has been entered.

Response to Amendment

2. The amendment dated 5/19/2008 has been fully considered and entered into the Record. Claims 1, 28 and 29 have been amended and contain no new matter. The amendment of claim 28 overcomes the previous 112 2nd paragraph rejection. Claims 1 and 4-32 are currently pending with claims 6-23 withdrawn from consideration and claims 1, 4, 5 and 24-32 are currently active.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 4, 5 and 24- 32 are rejected under 35 U.S.C. 103(a) as being obvious over Henkel (WO 01/83662 A1) in view of Giatras et al. (US 4,701,345). The English equivalent (US 2004/0023824 A1) of the WO document has been relied upon for this rejection.

a. Henkel discloses the use of particles with sizes ranging from 5 to 500nm for improving the soil-release properties of textiles and other surfaces (abstract and [0012]). The particles may be silica [0011] and hydrophilicize the surfaces to which they are attached [0002]. The particles used in accordance with the invention may be incorporated in liquid, gel-form or even solid compositions [0023]. These alternative

Art Unit: 1794

forms of presenting the hydrophilic particles to the desired surface serve as the claimed carrier and fixative particles in that the silica particle may be in a solution or modified [0023] to form a fixative particle comprising material in addition to silica. The "anchored in the surface" limitation is provide for in silica nanoparticle may be attached to an article's surface without the use of additional material. The applied reference provides for the particles with the instantly claimed size, but the WO document fails to teach or suggest the hydrophilic silica particle surface area. Examiner takes the position that since the instantly claimed average particle size is provided for the same particles would necessarily also provide for the claimed surface area.

b. Henkel fails to teach or suggest a percentage of a surface that is to be covered by the hydrophilic silica particles. The reference does disclose that the content of the silica particles should be gauged so that the surface of the article to be coated is sufficiently covered to impart the desired hydrophilicity [0014]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made article with the instantly claimed amount of silica particles, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

c. Henkel discloses the claimed invention except that it uses precipitated silica [0011] instead of fumed silica, Giatras et al. shows that fumed silica is an equivalent structure known in the art hydrophilic silica. Therefore, because these two forms of silica were art-recognized equivalents at the time the invention was made, one of ordinary skill

Art Unit: 1794

in the art would have found it obvious to substitute precipitated silica for fumed silica (abstract, Giatras et al.) in the invention of Henkel.

Response to Arguments

4. Applicant's arguments filed 5/19/2008 have been fully considered but they are not persuasive.

5. Applicant argues that Henkel teaches the temporary modification of an article's surface and that permanent modification is not desired and as such there is no teaching of securing the silica particles to the surface by a carrier, by being anchored in the surface, or by fixative particles. As Examiner has demonstrated in the rejection section of this action, the applied reference does in fact provide for the claimed methods of attaching the fumed silica particles to a surface. Henkel does teach that the application of the silica particles to the given surface may not be permanent, but in order for Henkel to modify a given surface, said surface must possess the applied silica nanoparticles at some juncture, thereby providing said surface with silica nanoparticles and imparting it with hydrophilicity. Furthermore, Applicant has failed to claim a surface permanently modified with fumed hydrophilic particles.

6. Applicant argues that Giatras et al. fail to provide for a teaching of securing the silica particles to the surface by a carrier, by being anchored in the surface, or by fixative particles. Examiner has relied upon Giatras et al. to teach that fumed and precipitated silica are equivalent structures. Applicant continues by arguing that while Giatras et al. teach that fumed and precipitated silica are art recognized equivalents, it is for a purpose different from that required by Henkel. Examiner takes the position that both Henkel and Giatras et al. disclose the coating

Art Unit: 1794

of articles with silica and Henkel teaches that their invention may be used on a wide variety surfaces [0012].

7. Applicant argues that Henkel and Giatras et al. are from different field of endeavor (non-analogous arts). As Examiner has demonstrated in the previous paragraph, Examiner takes the position that both Henkel and Giatras et al. disclose the coating of articles with silica and Henkel teaches that their invention may be used on a wide variety surfaces [0012].

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW D. MATZEK whose telephone number is (571)272-2423. The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Tarazano can be reached on 571.272.1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew D Matzek/
Patent Examiner, Art Unit 1794